

In the Matter of Network Management Practices
WC Docket No. 07-52

Comments by Steven Titch, Telecom Policy Analyst, The Reason Foundation.

Mr. Chairman and Honorable Commissioners:

Network management is important to assuring quality of broadband service. Service providers must be free to use sound management methods to ensure all their customers are able to enjoy the benefits of a high-speed Internet connection.

Rules that prevent or prohibit service providers from prioritizing certain types traffic, inspecting packets or taking pro-active steps to partition bandwidth, far from promising an egalitarian Internet, would create an environment where bandwidth-intensive applications employed used by handful of users crowd out the great majority of consumers.

Please consider the following points:

- Internet traffic is growing. In a report issued by the Discovery Institute in January, authors Bret Swanson and George Gilder wrote that U.S. Internet traffic in 2015 will be 50 times larger than 2006. Rather than exabytes (10^{18} bytes), the industry will be measuring traffic in terms of zettabytes (10^{21} bytes), or one million million million bytes.¹
- Even if you debate the Discovery Institute's projections, there is no denying the explosive growth of bandwidth use from year to year. U.S. Internet traffic was about 1.5 petabytes (10^{15} bytes) per month in 1996. By 2002, monthly traffic has reached 100 petabytes. By 2006, traffic was 700 petabytes per month, amounting to 8.4 exabytes per year.² With the development of YouTube, Internet-based videoconferencing, movie downloads, and online gaming and virtual worlds, there is no reason to expect, nor evidence to suggest, that the rate of bandwidth consumption will level off.
- Protocols like BitTorrent, used in peer-to-peer file sharing, are designed to consume as much available bandwidth as possible yet not relinquish any if demand increases from elsewhere.

¹ Bret Swanson and George Gilder, "Estimating the Exaflood," Discovery Institute, January 2008, p.2.

² Swanson and Gilder, pp.8-9.

- Certain applications, such as streaming video and online gaming, require management techniques to work properly.
- Filtering and management techniques are critical to spam blocking, virus protection and, potentially, copyright protection.
- Aside from the Madison River case, which was adjudicated by the FCC under existing rules, there has been no case of a service provider blocking or censoring legal Web site or Internet-based application. Although some newspapers and Web sites headlined an AP story on Comcast's use of a network management technique as "Comcast Blocks Internet Traffic," the first three paragraphs of the article make clear that the company was slowing down huge file uploads from a few users, not blocking access or content. While acknowledging network neutrality guidelines, the author allows that Comcast's action may indeed have benefits for the great majority of its customers. "Comcast's interference, on the other hand, appears to be an aggressive way of managing its network to keep file-sharing traffic from swallowing too much bandwidth and affecting the Internet speeds of other subscribers."³
- While it has been a common practice to offer consumers unlimited Internet use for a flat fee, a consumer expectation is not a consumer "right." Given that there is a class of Internet users who consume much more bandwidth than average households, it is a legitimate question whether it is sound strategy for service providers to continue to spread the higher costs of these users among the general population via flat fees or instead create a pricing tier that forces the heavy users to pay the costs they impose on the network. Service providers should have the freedom to explore pricing strategies that might be more in line with the way users consume bandwidth in 2008 compared to the past.
- Business partnerships that favor some Web site owners over others are not illegal discrimination. In the brick-and-mortar world, it is a common business practice for a product manufacturer to pay a premium to a distributor or retailer for expedited delivery, prominent display, or favored shelf space. Component manufacturers engage in exclusive or limited original equipment manufacturer (OEM)

³ Peter Svensson, Associated Press, "Comcast Blocks Some Internet Traffic," posted at Breitbart.com, Oct. 19, 2007. Available at http://www.breitbart.com/article.php?id=D8SCEBLG0&show_article=1.

agreements with larger companies, often branding their partnerships (i.e. “Intel Inside”). In the digital market environment, service provider should be free to sell management-based services, such as prioritization and partitioning, especially to large applications providers like the TV and motion picture studios and gaming companies, that guarantee better performance. This lets service providers monetize the value of their own property, enhance the broadband experience for all users, and again, shift the cost of heavy bandwidth use and management to the parties that are directly responsible for it.

In summary, network neutrality, or other regulations that would limit the ability of service providers to manage their networks would diminish the quality and reliability that very large applications providers will need for their broadband services to work properly. This in turn would chill investment and slow deployment, because consumers would find the broadband experience to be mediocre at best. The overall utility of the Internet declines as it become clogged. Prices would remain high for consumers because cost of managing congestion could not be transferred to the largest users of bandwidth. Although attacked as a “toll lane” on the Web, such paid partitioning will keep the standard transmission lanes—still extremely fast—cleared for less commercial and less bandwidth-intensive applications, resulting in a better functioning Internet for all. This will do more to ensure the Internet remains equally useful for all than regulating or banning Internet network management.

Respectfully submitted,

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